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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,308	02/22/2005	Bertram Bauer	022862-1060-00	6012

23409 7590 04/13/2009

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EXAMINER	
MOORER, CELENE NICOLE	
ART UNIT	PAPER NUMBER
3771	

MAIL DATE	DELIVERY MODE
04/13/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/525,308	BAUER ET AL.	
	Examiner	Art Unit	
	CELENE MOORER	3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-10,12-19 and 21-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,3-10,12-19 and 21-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to an amendment filed 2/24/2009. As directed by the amendment, claims 2, 11, and 20 have been cancelled, and claims 21-23 have been added. Thus, claims 1, 3-10, and 12-19 are pending in this application.

Claim Objections

2. Claims 1, 10, 21, and 22 are objected to because of the following informalities: The comma should be replaced in the following lines "at least one, first recipient and at least one other, second recipient" with "at least one of the first recipient and at least one of the other second recipient. Furthermore the claims should refer to either the first or second recipient using the word “said" or “the". The dependent claims from 1 and 10 should be checked to ensure consistency in claim language. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 5, it in unclear as to how the final pressure in the at least one first recipient is defined.

5. Claim 1 recites the limitation "the filling act" in the seventh line of the claim. Claims 6 and 7 recite the limitation "the act of presetting" in the first line of the claim. There is insufficient antecedent basis for these limitations in these claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,986,260 to *Iams et al*.

As to claim 1, *Iam*s discloses a method to act upon at least two recipients (12a, 12b, 14a, 14b) of a pneumatic system in an alternating manner, in particular a pneumatic massage system of a motor vehicle seat, with a flow of pressure medium (Column 2, Lines 21-48), the method comprising providing at least one, first recipient (12a, 12b, 14a, 14b) and at least, one second recipient (12a, 12b, 14a, 14b) filling the at least one, first recipient (12a, 12b, 14a, 14b) with a gaseous working fluid, while actively suctioning off working fluid is actively suctioned off from the at least one other second recipient (12a, 12b, 14a, 14b) and the filling act includes using working fluid from the at least one other, second recipient (12a, 12b, 14a, 14b) to fill the at least one first recipient (12a, 12b, 14a, 14b) (Column 5, Lines 14-23).

As to claim 5, further comprising presetting a final pressure (defined as when first or second recipient has begun to deflate) in the at least one, first recipient (12a, 12b, 14a, 14b) upon at least two recipients (12a, 12b, 14a, 14b) in an alternating manner (Column 7, Lines 37-48).

As to claim 10, pneumatic circuit of a pneumatic system in an alternating manner, with a flow of pressure medium, at least one, first recipient (12a, 12b, 14a, 14b) and at least one, second recipient (12a, 12b, 14a, 14b) to alternatingly receive a flow of pressure medium with at least one feed pump (24) conveying the pressure medium driving means for driving the feed pump (24) with the connecting means (26, 28) between the feed pump (24) and characterized in that the at least one, first recipient (12a, 12b, 14a, 14b) is connected to the at least one, second recipient (12a, 12b, 14a, 14b) via the connecting means (26, 28) and the feed pump (24) and characterized in that the at least one, first recipient (12a, 12b, 14a, 14b) and the at least one, second recipient (12a, 12b, 14a, 14b) are connected to the at least one feed pump (24) via the connecting means (26, 28) such that working fluid pumped out of the at least one, second recipient (12a, 12b, 14a, 14b) is supplied to the at least one, first recipient (12a, 12b, 14a, 14b) (Figure 1, Column 5, Lines 14-23, 62-68).

As to claim 12, pneumatic circuit characterized in that the suction side (Figure 1- suction side encompasses reference numbers 74 and 76 of pump leading to conduit 64) of the at least one feed pump (24) is

connected to at least one, first recipient (12a, 12b, 14a, 14b), while the pressure side (Figure 1- pressure side encompasses reference numbers side of pump in which conduits 63 and 65 are connected) of the feed pump (24) is simultaneously connected to the at least one, second recipient (12a, 12b, 14a, 14b).

8. Claims 1, 3, 4, 5, 10, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,361,512 B1 to *Mackay et al*.

As to claim 1 and 21, MacKay discloses a method to act upon at least two recipients (A, B, C, D) of a pneumatic system in an alternating manner, in particular a pneumatic massage system of a motor vehicle seat, with a flow of pressure medium (Column 1, Lines 54-62), the method comprising providing at least one, first recipient (A, B, C, D) and at least, one second recipient (A, B, C, D) filling the at least one, first recipient (A, B, C, D) with a gaseous working fluid, while actively suctioning off working fluid is actively suctioned off from the at least one other second recipient (A, B, C, D) and the filling act includes using working fluid from the at least one other, second recipient (A, B, C, D) to fill the at least one first recipient (A, B, C, D) (Column 6, Lines 16-34).

As to claim 3 and 21, further comprising filling the at least one other, second recipient (A, B, C, D) with a gaseous working fluid, while actively suctioning off working fluid is actively suctioned off from the at least one, first recipient (A, B, C, D) to provide alternating filling of at least

two recipients (A, B, C, D) (Column 6, Lines 16-34), the alternating filling is achieved by a reversal of a rotational direction of a feed pump (78,80) conveying the working fluid (see Figure 1, Column 3, Lines 36-67; Column 4, Lines 1-4)

As to claim 4, further comprising presetting a motor speed of an electric motor (26) driving the feed pump (78, 80) (Column 3, Lines 30-35, Column 5, Lines 39-42). In regards to this claim, it is well known in the art that upon activating an electric motor, a motor speed is preset at a certain rate in order to drive a pump.

As to claim 5, further comprising presetting a final pressure (defined as when first or second recipient is completely deflated) in the at least one, first recipient (A, B, C, D) upon at least two recipients (A, B, C, D) in an alternating manner (Column 6, Lines 16-34).

As to claim 10, pneumatic circuit of a pneumatic system in an alternating manner, with a flow of pressure medium, (Column 1, Lines 54-62) at least one, first recipient (A, B, C, D) and at least one, second recipient (A, B, C, D) to alternatingly receive a flow of pressure medium with at least one feed pump (78, 80) conveying the pressure medium driving means for driving the feed pump (78, 80) with the connecting means (76, 74) between the feed pump (78, 80) and characterized in that the at least one, first recipient (A, B, C, D) is connected to the at least one, second recipient (A, B, C, D) via the connecting means (76, 74) and the

feed pump (78, 80) and characterized in that the at least one, first recipient (A, B, C, D) and the at least one, second recipient (A, B, C, D) are connected to the at least one feed pump (78, 80) via the connecting means (76, 74) such that working fluid pumped out of the at least one, second recipient (A, B, C, D) is supplied to the at least one, first recipient (A, B, C, D) (Figure 5, Column 6, Lines 16-34).

As to claim 22, vehicle seat assembly (Figure 15, Column 7, Lines 29-37) comprising at least one, first recipient (242) and at least one, second recipient (242) integrated into the seat, the at least one, first recipient and the at least one, second recipient to alternatingly receive a flow of pressure medium at least one feed pump (242) conveying the flow of pressure medium, means (26) for driving the at least one feed pump (78, 80) and connecting means (76, 74) for conducting working fluid between the at least one feed pump and the at least one, first recipient and the at least one, second recipient characterized in that the at least one, first recipient (242) is connected to the at least one, second recipient (242) via the connecting means (76, 74) and the at least one feed pump (78, 80) and characterized in that the at least one, first recipient (242) and the at least one, second recipient (242) are connected to the at least one feed pump (78, 80) via the connecting means (76, 74) such that working fluid pumped out of the at least one, second recipient (242) is supplied to the at least one, first recipient (242) (Figure 5, Column 6, Lines 16-34).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 6, 7, 13-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,986,260 to *Iams et al* to US Patent No. 5,127,708 to *Kishi et al*.

As to claim 6 and 7, *Iam* does not expressly disclose that the act of presetting includes manually presetting the final pressure in the at least one, first recipient in an alternating manner via corresponding operating elements and by a control unit in accordance with signals of a sensor to detect occupation of a seat.

Kishi teaches a vehicle seat comprising at least two inflatable recipients (18-27) in which the final pressure in the recipients is manually controlled by a microcomputer (37) that controls the valves (33) that regulates the amount of pressurized air to the recipients (Column 2, Lines 64-68; Column 3, Lines 1-11). Furthermore, *Kishi* discloses that a pressure sensor (35) is located in the seat for detecting movement of the seat occupant and these signals are sent to the microcomputer (37) (Column 3, Lines 12-25).

It would have been obvious to one of ordinary skill at the time the invention was made to modify *Iam*s method to include a microcomputer as taught by *Kishi* for regulating the final pressure in the at least, one first recipient in order to provide additional control over desired amount of air in each recipient. Also, it would have been obvious to one of ordinary skill at the time the invention was made to modify *Iam*s method to include a pressure sensor as taught by *Kishi* in order to provide additional mechanism for sensing when pressure is needed in the recipients.

As to claims 13 and 19, *Iam* does not expressly disclose that the pneumatic circuit has a component controlling the flow of pressure medium and at least one sensor element, which acquires information about the occupation of a seat and transmits the information to a control unit for the pneumatic circuit.

Kishi teaches a vehicle seat comprising at least two inflatable recipients (18-27) in which the final pressure in the recipients is manually controlled by a microcomputer (37) that controls the valves (33) that regulates the amount of pressurized air to the recipients (Column 2, Lines 64-68; Column 3, Lines 1-11). Furthermore, *Kishi* discloses that a pressure sensor (35) is located in the seat for detecting movement of the seat occupant (Column 3, Lines 12-25) and these signals are sent to the microcomputer (37).

It would have been obvious to one of ordinary skill at the time the invention was made to modify *Iam*s pneumatic circuit to include a microcomputer as taught by *Kishi* for controlling the flow of pressure medium in order to obtain desired amount of pressure in each recipient. Also, it would have been obvious to one of ordinary skill at the time the invention was made to modify *Iam*s pneumatic circuit to include a pressure sensor as taught by *Kishi* in order to ensure pressure is equally distributed in each recipient.

As to claim 14, the modified *Iam*s pneumatic circuit does not expressly disclose the location of the component (37 from *Kishi*) controlling the flow of pressure medium. It would have been obvious to one of ordinary skill in the art At the time the invention was made to place the component (37 from *Kishi*) controlling the flow of medium pressure flow so that it is connected to the pressure side (Figure 1 of *Iam*s-pressure side encompasses reference numbers side of pump in which conduits 63 and 65) of the feed pump (24 from *Iam*s) in order to provide better control over the air pressure being distributed into the recipients.

As to claim 15 and 16, the modified *Iam*s pneumatic circuit teaches that the component (37 from *Kishi*) controlling the flow of pressure medium features a pneumatically driven actuator and at least one valve (*Kishi*, Column 2, Lines 64-68; Column 3, Lines 1-11). In regards to this claim, the component controls the valves, which regulates pressure flow

from the connected feed pump which can be considered a pneumatically driven actuator; therefore both the actuator and valve are features of the component.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,986,260 to *Iams et al* to US Patent No. 2,780,222 to *Polzin et al*.

As to claim 9, *Iam*s does not expressly disclose actuating a bypass between the suction side and pressure side of the feed pump. *Polzin* discloses a positive pressure air source that has valves (28, 30, and 32) that switch to the negative side to suck off the working fluid that was pumped in by the positive side of the air pressure source (Column 4, Lines 10-25). *Polzin* also teaches an obvious way of alternating between the suction (negative side) and pressure (positive side) of the pressure source (Column 4, Lines 16-25).

It would have been obvious to one of ordinary skill at the time the invention was made to modify *Iam*s pneumatic circuit to include a bypass between the suction side and pressure side of the feed pump as taught by Polzin in order to provide more control of the pressure from the pump to the recipients.

12. Claims 8, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,986,260 to *Iams et al*.

As to claim 8, *Iam*s has a valve but lacks a detail description that the valve is a throttling valve. *Iam*s does teaches that restricting valves (20,22) regulate the pressure in the at least one, first recipient in an alternating manner (Column 5, Lines 14-27) and these valves are connected to the pressure side of the feed pump via conduits (16, 18, 26, 30, 32, 28). It would have been obvious to one of ordinary skill at the time the invention was made to replace the restricting valves from *Iam* with throttling valves since throttling valves are well known in the art and would perform equally as well with the valve for limiting the amount of final pressure being distributed in each of the recipients.

As to claim 17, *Iam*s does not expressly disclose that the at least one feed pump (24) is a vane type pump. However, *Iam*s does disclose that the pump (24) can comprise several different types of pumps (Column 8, Lines 11-15). It would have been obvious to one of ordinary skill at the time the invention was made to replace *Iam*s feed pump with a vane type pump since it is well known in the art and would perform equally as well

As to claim 18, *Iam*s does not expressly disclose that the pneumatic circuit includes at least one output valve, which opens a connecting line when a specific pressure limit is reached on the suction side of the at least one feed pump in order to supply additional working fluid to the pneumatic circuit. However, *Iam*s does disclose that there are exhaust valves (54, 56) present on the suction side (Figure 1- suction side

encompasses reference numbers 74 and 76 of pump leading to conduit 64) of the feed pump (24) that opens connecting line (68) for supplying additional working fluid to needed recipients (Column 8, Lines 42-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made that *Iam*s exhaust valve could be used as at output valve since they are well known in the art and would perform equally as well.

Response to Arguments

13. Applicant's arguments with respect to claims 1, 3-10 and 12-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pekanmaki et al (4,989,589) is cited to show a different massager.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CELENE MOORER whose telephone number is (571)270-7411. The examiner can normally be reached on M-F 7:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571)272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CELENE MOORER/
Examiner, Art Unit 3771

/Justine R Yu/
Supervisory Patent Examiner, Art Unit 3771